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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,578

04/12/2004

Ronald C. Mehl

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7590

10/04/2006

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Syosset, NY 11791

EXAMINER

DRODGE, JOSEPH W

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,578

Applicant(s)

MEHL, RONALD C.

Examiner

Joseph W. Drodge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 7-12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Shroeder et al patent 6,535,795. The reference disclose means for decontaminating wastewater (column 8, lines 14-15 and column 15, lines 38-46) including coagulation, means of measuring water parameters (column 3, lines 50-61), means for controlling and a programmable logic controller (PLC). Also, Shroeder et al teach such remote controller used for water treatment that includes coagulation and transmits and receives data remotely (column 19, lines 55-61).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryazanova et al patent 6,802,981 in view of Shroeder et al patent 6,535,795.

Ryazanova disclose means for decontaminating wastewater including coagulation (all covered in the Summary of the invention columns 4-5), means of measuring water parameters (column 10, lines 8-35), means for controlling and a programmable logic controller (PLC, see column 10, lines 8-12).

The reference is silent as to whether the PLC is a remote controller that receives and transmits data remotely. However, Shroeder et al disclose means for decontaminating wastewater (column 8, lines 14-15 and column 15, lines 38-46) including coagulation, means of measuring water parameters (column 3, lines 50-61), means for controlling and a programmable logic controller (PLC). Also, Shroeder et al teach such remote controller used for water treatment that includes coagulation and transmits and receives data remotely (column 19, lines 55-61).

It would have been obvious to one of ordinary skill in the art to have combined the remote PLC controller with the controlled water treatment system of Ryazanova to enable greater control optimizations that incorporate expert systems and neural networks.

Claims 2-6,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryazanova et al in view of Shroeder et al as applied to claim 1 above, and further in view of Watanabe et al patent 4,014,766. The Ryazanova et al system includes, for claim 2 and claims dependent therefrom a coagulant stage (column 5, lines 54-64), an

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accelerated electro-chemical oxidation stage (column 13, line 50-column 14, line 29) and a sludge/media handling stage (column 9, lines 8-21). Claim 2 and claims dependent thereof additionally require an energized magnetic media filtration stage, (i.e. stage such as an electromagnetic treatment stage). Watanabe et al teach water treatment that includes coagulation, filtration, sedimentation and an electrochemical magnetic treatment stage. It would have been further obvious to have incorporated such magnetic treatment stage of Watanabe to promote sedimentation separation of the floc generated by the coagulation stage. For claims 3,6,13 and 14, Ryazanova also disclose various tanks or reservoirs and overflow and underflow outlets 4,11,18. For claims 4 and 5, sensors or probes which measure ion concentrations and pH, DO and TDS are included (column 10, lines 25-32).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryazanova et al in view of Shroeder et al as applied to claim 1 above, and further in view of Watanabe et al patent 4,014,766, as applied to claim 2 and still further in view of Brunsell PGPUBS Document US 2005/0218077. Claim 15 differs in requiring additionally, a sludge and media handling stage that includes a dryer/separator for separating low density materials, a cyclone and a magnetic separator in a sludge handling stage .. Brunsell teach such combination of separation units (paragraph 81). It would have been also obvious to have incorporated such separation units to separate different types of sludge contaminants that can be concentrated and recycled for reuse.

Claims 7-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

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base claim and any intervening claims. Claims 7-12 are objected to in view of recitation of the coagulation stage including a reactor that in turn encompasses a grinder, loosening means and energized media bed. The cited prior art does not envision a treatment stage that encompasses all of coagulation, grinding or comminuting, loosening and an energized media bed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

September 29, 2006


JOSEPH DRODGE
PRIMARY EXAMINER